

WHAT IS CLAIMED IS:

1. An image-forming controller for an image forming apparatus in which a plurality of image forming sections are arranged in parallel for respective predetermined color components to sequentially form images on a recording medium sequentially passing by the image forming sections, the image-forming controller outputting raster image data for the predetermined color components to the corresponding image forming sections, thereby allowing a multi-color image to be formed, the image-forming controller comprising:

raster-rectangle converting means for converting raster image data for a predetermined color-space comprising color components different from the predetermined color components into a plurality of pieces of rectangular image data;

storing means for storing the plurality of pieces of rectangular image data converted by the raster-rectangle converting means;

a plurality of rectangle-raster converting means, provided for the respective predetermined color components, for converting the plurality of pieces of rectangular image data into raster image data;

transferring means for reading identical rectangular image data predetermined multiple times, the identical rectangular image data being stored by the storing means,

and for sequentially transferring the read identical rectangular image data to the rectangle-raster converting means; and

a plurality of color-space converting means, provided for the respective color components, for converting the raster image data converted by the rectangle-raster converting means into a color-space comprising the predetermined color components to generate respective pieces of raster image data for the predetermined color components and for outputting the pieces of raster image data to the corresponding image forming sections for the predetermined color components.

2. The image-forming controller according to claim 1, wherein the transferring means reads the identical rectangular image data the predetermined multiple times with a delay corresponding to a predetermined number of pieces of data, the identical rectangular image being stored by the storing means, and sequentially transfers the read identical rectangular image data to the corresponding rectangle-raster converting means.

3. The image-forming controller according to claim 2, further comprising numeric-value setting means for setting a numeric value corresponding to the predetermined number of

pieces of data, wherein the transferring means reads the identical rectangular image data the predetermined multiple times with a delay corresponding to the number of pieces of data corresponding to the numeric value set by the numeric-value setting means, the identical rectangular image data being stored by the storing means, and sequentially transfers the read identical rectangular image data to the corresponding rectangle-raster converting means.

4. The image-forming controller according to claim 2, wherein the predetermined number of pieces of data is based on an arrangement interval of the image forming sections.

5. The image-forming controller according to claim 3 wherein the predetermined number of pieces of data is based on an arrangement interval of the image forming sections.

6. The image-forming controller according to claim 2, wherein the predetermined number of pieces of data corresponds to a delay of image formation between the image forming sections.

7. The image-forming controller according to claim 3, wherein the predetermined number of pieces of data corresponds to a delay of image formation between the image

forming sections.

8. The image-forming controller according to claim 4, wherein the predetermined number of pieces of data corresponds to a delay of image formation between the image forming sections.

9. The image-forming controller according to claim 1, wherein the predetermined color components comprise yellow, magenta, cyan, and black color components or yellow, magenta, and cyan color components, and the predetermined color-space is a color-space comprising red, green, and blue color components, and wherein the color-space converting means converts red, green, and blue color-space raster image data converted by the rectangle-raster converting means into a color-space comprising the predetermined yellow, magenta, cyan, and black color components or the predetermined yellow, magenta, and cyan color components to generate raster image data for the respective predetermined color components and outputs the raster image data to the image forming sections for the predetermined color components.

10. The image-forming controller according to claim 1, further comprising data-packet generating means for

generating data packets containing rectangular image data converted by the raster-rectangle converting means, a page identification, a rectangular-image number identification, and a transfer-destination identification indicating one of the rectangle-raster converting means, wherein the storing means stores, as data packets generated by the generating means, the plurality of pieces of rectangular image data converted by the raster-rectangle converting means, and wherein the transferring means reads a data packet containing the identical rectangular image data the predetermined multiple times, the identical rectangular image data stored by the storing means, and sequentially transfers the data packet to the rectangle-raster converting means.

11. A method for an image-forming controller for an image-forming apparatus in which a plurality of image forming sections are arranged in parallel for respective predetermined color components, the image forming sections sequentially forming images on a recording medium sequentially passing by the image forming sections, and the image-forming controller outputting raster image data for each predetermined color component to the image forming sections, thereby allowing a multi-color image to be formed, the image-forming controller comprising raster-rectangle

converting means for converting raster image data for a predetermined color-space comprising color components different from the predetermined color components into a plurality of pieces of rectangular image data, storing means for storing the plurality of pieces of rectangular image data converted by the raster-rectangle converting means, a plurality of rectangle-raster converting mean, provided for the respective predetermined color components, for converting the plurality of pieces of rectangular image data into raster image data, and a plurality of color-space converting means, provided for the respective color components, for converting the raster image data converted by the rectangle-raster converting means into a color-space comprising the predetermined color components to generate respective pieces of raster image data for the predetermined color components and for outputting the pieces of raster image data to the corresponding image forming sections for the predetermined color components, the method comprising:

a step of reading identical rectangular image data predetermined multiple times, the identical rectangular image being stored by the storing means, and sequentially transferring the read identical rectangular image data to the rectangle-raster converting means.

12. A program for executing the method according to

claim 11.

13. A storage medium in which the program according to claim 11 is stored so as to be readable by a computer.